the group consisting of *A. murale*, *A. pintodasilvae*, *A. malacitanum*, *A. lesbiacum*, *A. fallacinum*, *A. argenteum*, *A. tenium* and *A. heldreichii*, having a concentration of nickel in its above-ground tissues of at least 2.5% based on the gross dry weight of the above-ground tissues, wherein the plant is produced by a method comprising at least the following step:

growing the plant in a soil maintained under soil conditions such that the concentration of calcium in the soil is from about 0.128 mM to about 5 mM and the pH is below about 7.0 until such time that the concentration of nickel in the aboveground tissues is at least 2.5% based on the gross dry weight of the above-ground tissues.

14. A nickel hyperaccumulating plant of the *Alyssum* genus having (1) a concentration of nickel in its above-ground tissues of at least 2.5% based on the gross dry weight of the above-ground tissues, and (2) a concentration in its above-ground tissues of at least one other metal selected from the group consisting of Co, Pd, Rh, Ru, Pt, Ir, Os and Re, wherein the plant is produced by a method comprising at least the following step:

growing the plant in a soil maintained under soil conditions such that the concentration of calcium in the soil is from about 0.128 mM to about 5 mM and the pH is below about 7.0 until such time that the concentration of nickel in the above-ground tissues is at least 2.5% based on the gross dry weight of the above-ground